

LAWRENCE, Mitchell Graham BAppSc (Hons) QUT

Thesis Title: Crosstalk Between Developmental and Tumour-Specific Signalling Pathways: Kallikrein-Related Serine Peptidases and Nodal in Prostate Cancer.

Supervisors:

Prof Judith Clements (Principal)

Prof David Nicol (Associate)

Citation: *Cancer progression is often described as a caricature of embryonic development. This project examined interactions between molecules that are common to prostate cancer and developmental cells with those that are distinct to each cell type.*

The levels of a subset of proteins known as kallikreins, which are only produced by the adult prostate, were shown to be modulated male sex hormones as well as embryonic factors that are re-expressed in prostate cancer. Furthermore, this study found that a particular embryonic signalling pathway, the Nodal axis, increases the aggressiveness of prostate cancer cells.